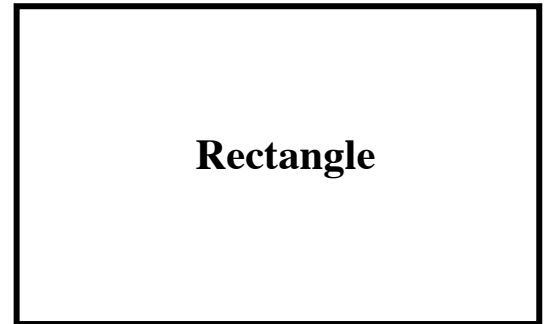
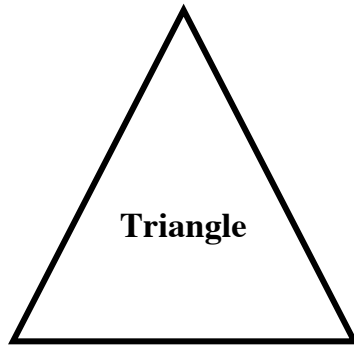
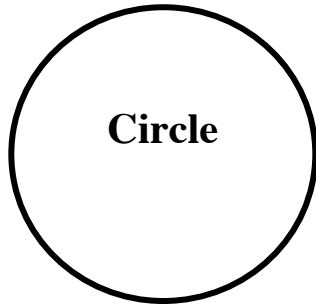
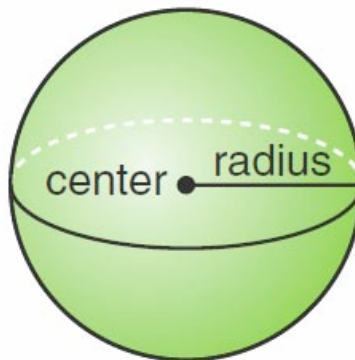
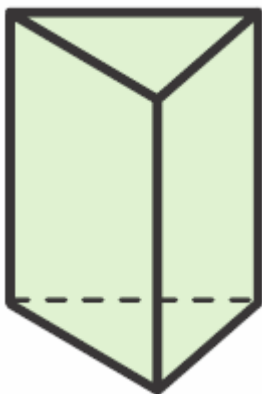


**2-Dimensional (2-d)** – a figure whose points are all in one plane but not all on one line



**3-dimensional (3-D)** – a figure whose points are not all in a single plane

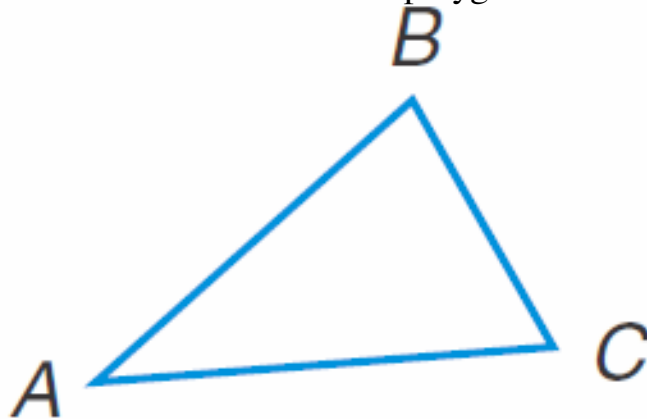


**Line** – a 1-dimensional straight path that extends forever in opposite directions; named using two points on it



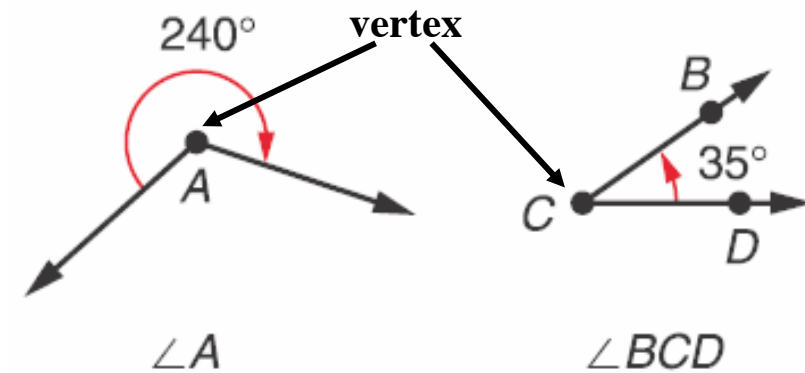
Line AB, or  $\overleftrightarrow{AB}$

**Adjacent Sides** – two sides of a polygon with a common vertex

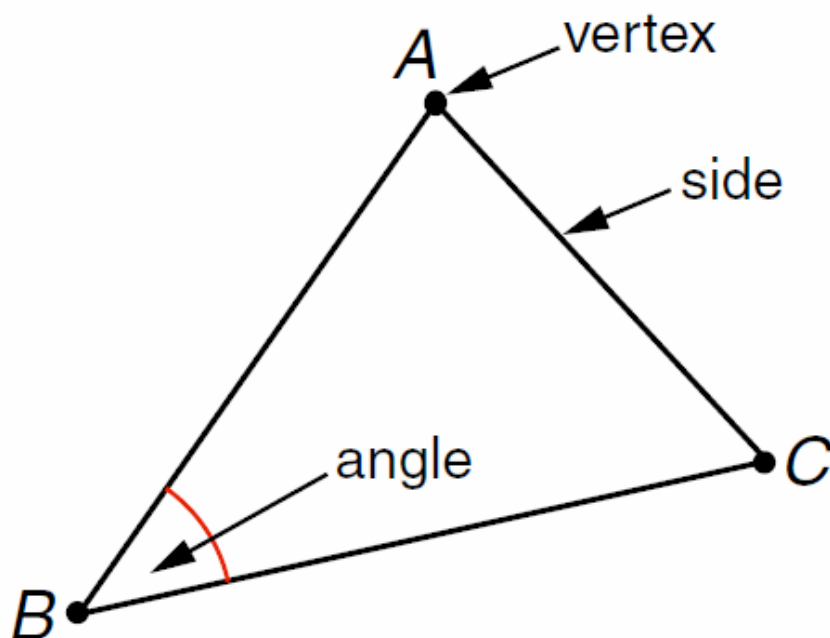


Sides  $AB$  and  $BC$ ,  $BC$  and  $CA$ , and  $CA$  and  $BA$  are pairs of adjacent sides

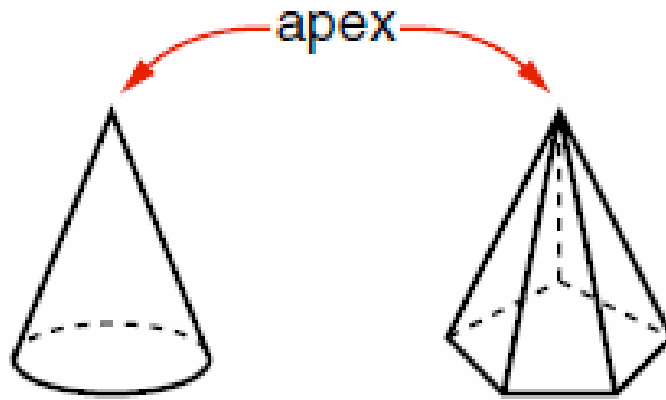
**Angle** – a figure formed by two rays or two line segments with a common endpoint called the vertex of the angle; the rays or segments are called the sides



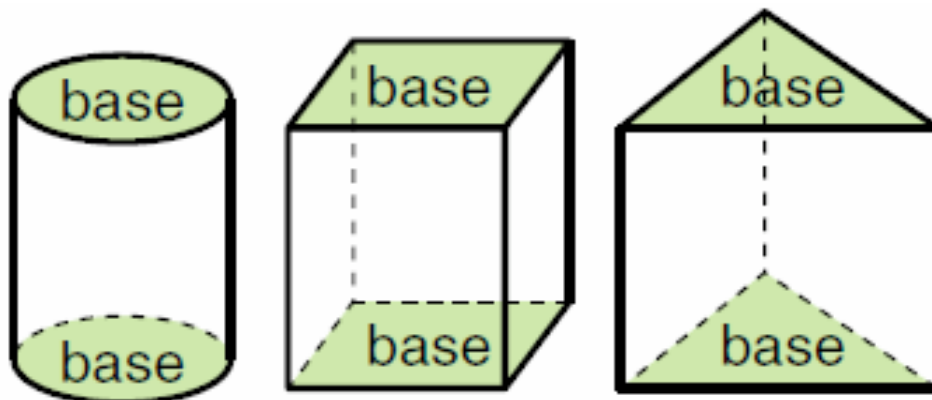
**Angle of a Triangle** – the angles on the interior of a triangle



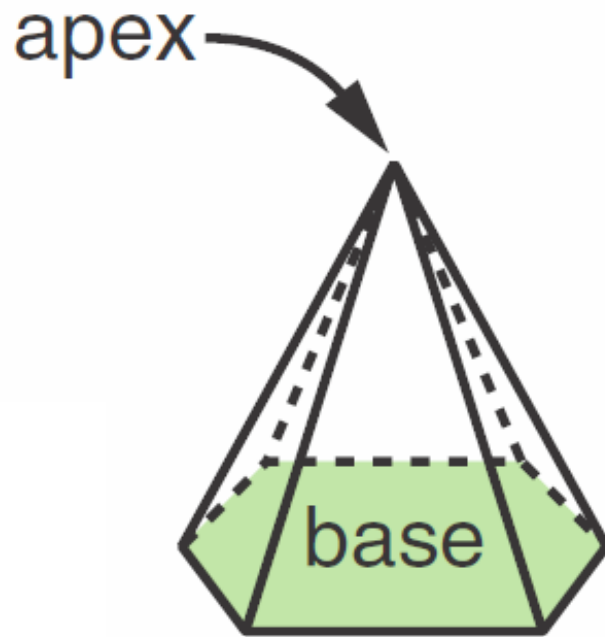
**Apex** — in a pyramid or cone, the vertex opposite the base; in a pyramid, all the non-base faces meet at the apex



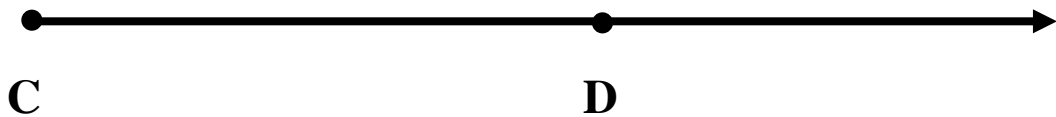
**Base of a prism or cylinder** — either of the two parallel and congruent faces that define the shape of a prism or cylinder; in a cylinder, the base is a circle



**Base of a Pyramid** – the face of a pyramid that is opposite the apex

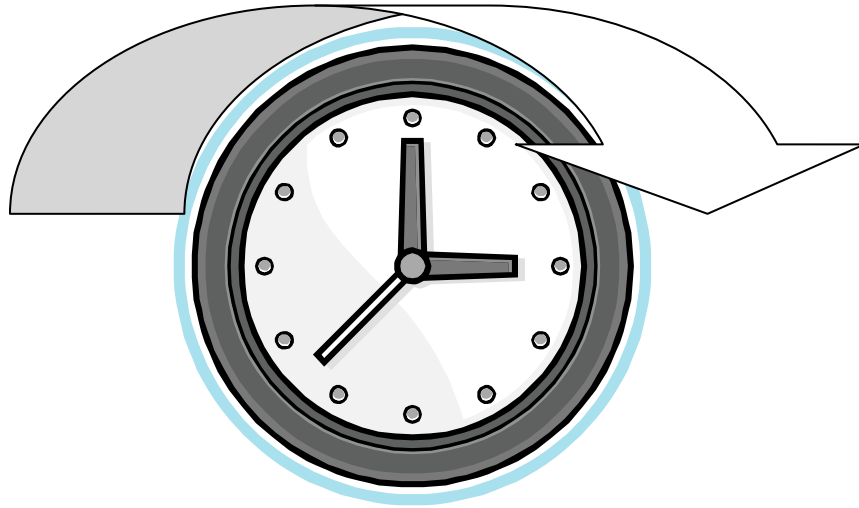


**Ray** – a part of a line starting at the ray's endpoint and continuing forever in one direction; often named by its endpoint and another point on the ray

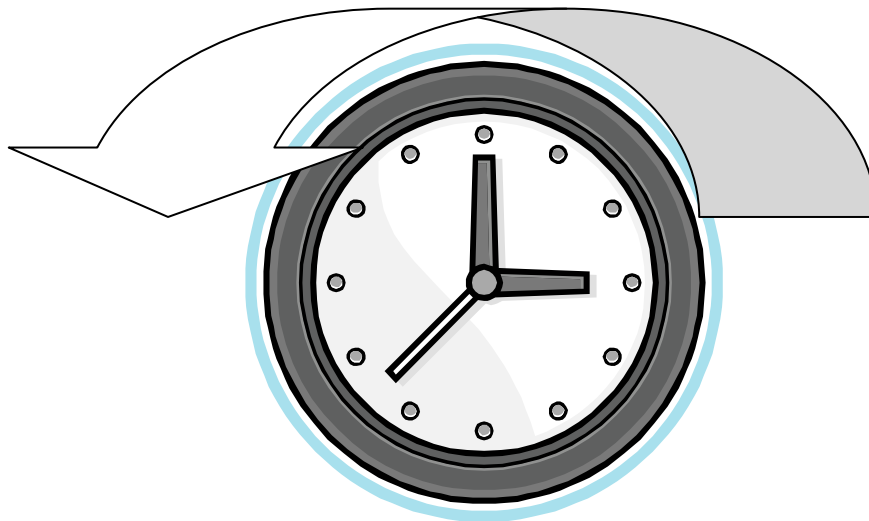


The Ray CD or  $\overrightarrow{CD}$

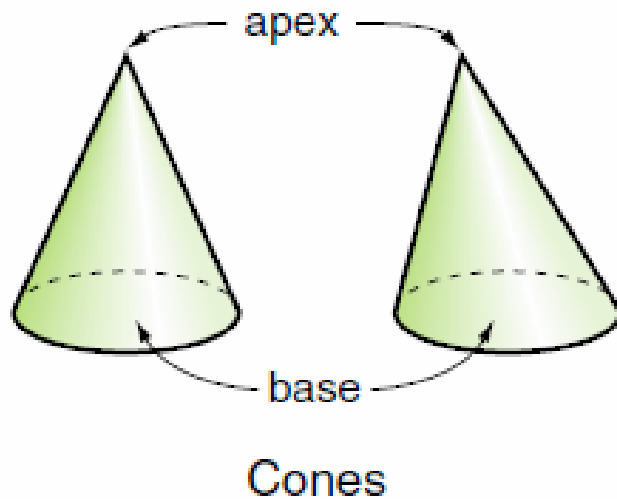
**Clockwise (Right Turn)** – the direction in which the hands move on a typical analog clock; a turn to the right



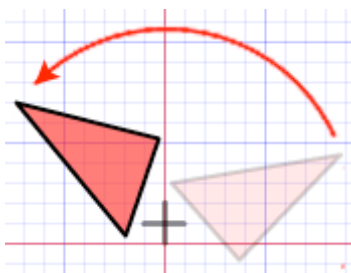
**Counterclockwise (Left Turn)** – opposite the direction in which the hands move on a typical analog clock; a turn to the left



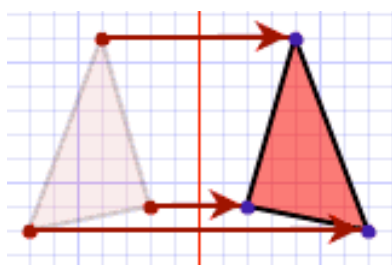
**Cone** — a geometric solid with a circular base, a vertex called an apex not in the plane of the base, and all of the line segments with one endpoint at the apex and the other endpoint on the circumference of the base



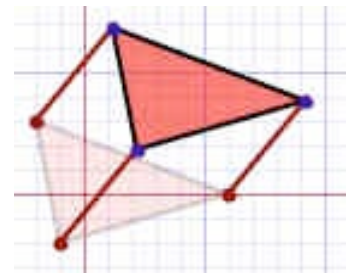
**Congruent** – figures having the same size and shape



**Rotation** (turn)



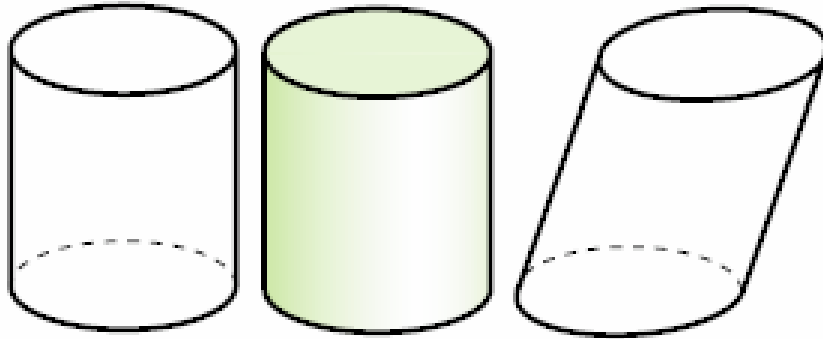
**Reflection** (flip)



**Translation** (slide)

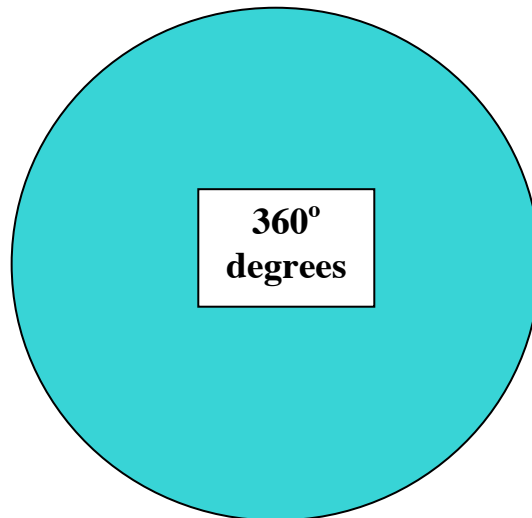
Also, sides and/or angles of figures having the same measure.

**Cylinder** — a geometric solid with two congruent, parallel circular regions for bases and a curved face formed by all the segments with an endpoint on each circle that are parallel to a segment with endpoints at the centers of the circles; also called a circular cylinder

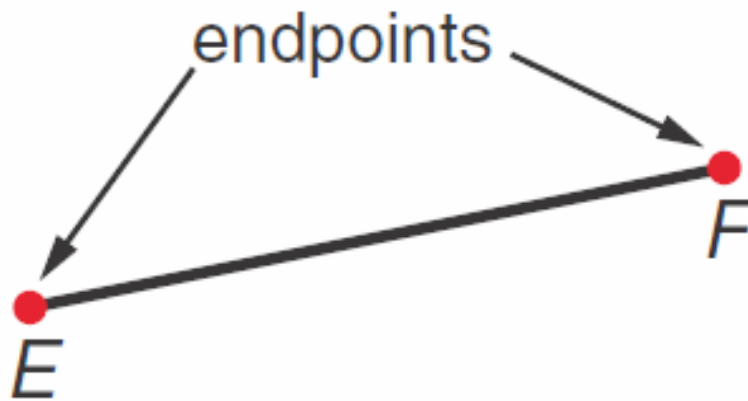


Cylinders

**Degree** — a unit of measure for angles based on dividing a circle into 360 equal parts; a unit for measuring temperature

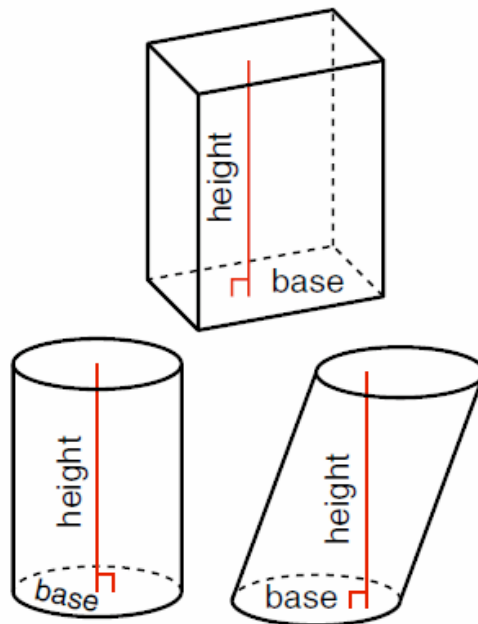


**Line Segment** – a part of a line between and including two points called endpoints; often named by its endpoints

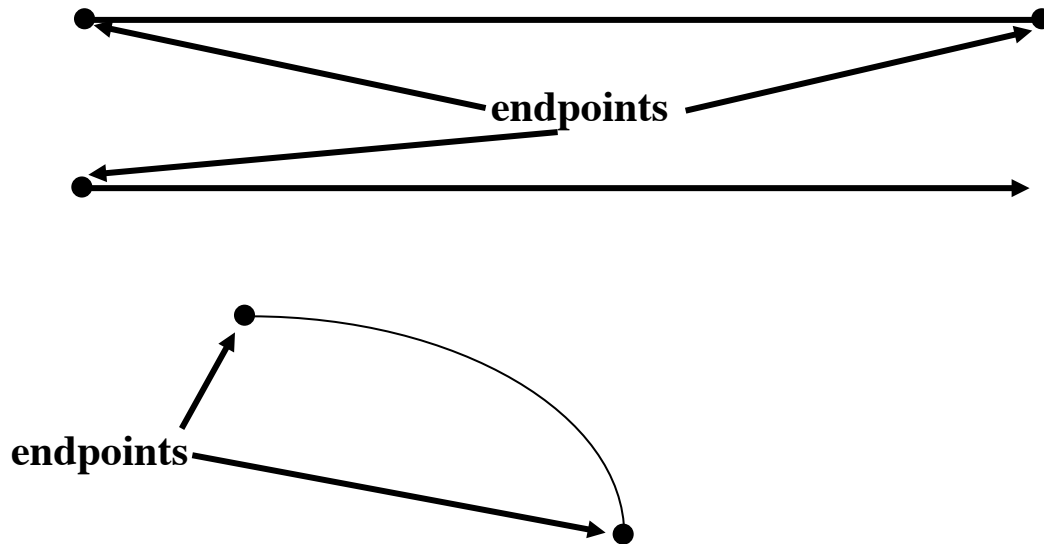


Segment  $EF$ , or  $\overline{EF}$

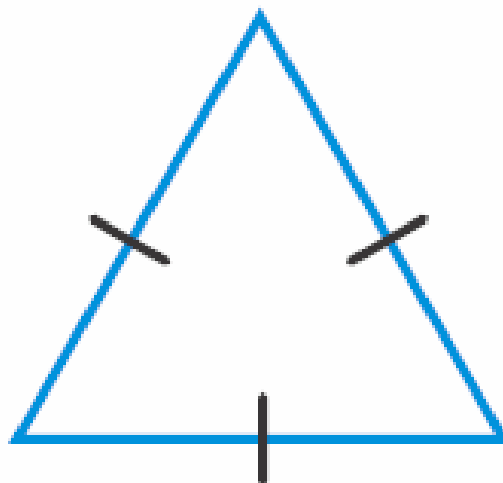
**Edge** – the length of the shortest line segment from a base of a prism or cylinder to the plane containing the opposite side; the height is perpendicular to the base



**Endpoint** – a point at the end of a line segment, ray or arc

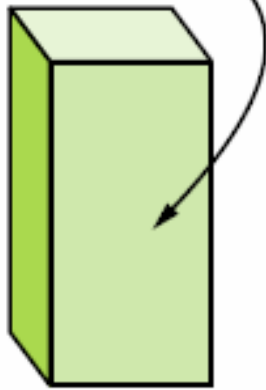


**Equilateral Triangle** – a triangle with all three sides equal in length; each angle measures  $60^\circ$ , so it is also called an equiangular triangle

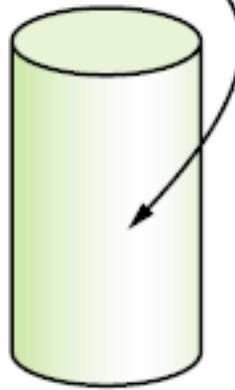


**Face** – a flat surface on a 3-dimensional shape; some special faces are called bases

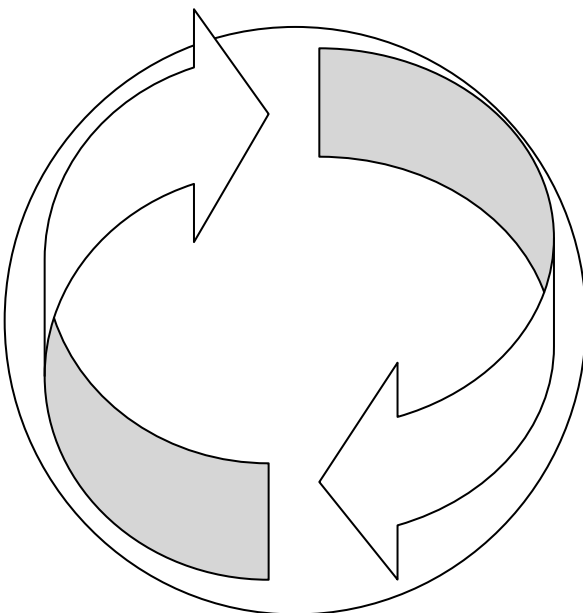
a flat face



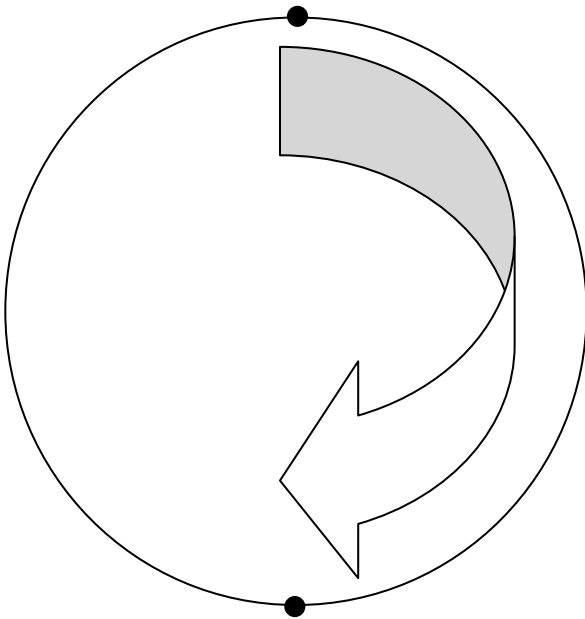
a curved face



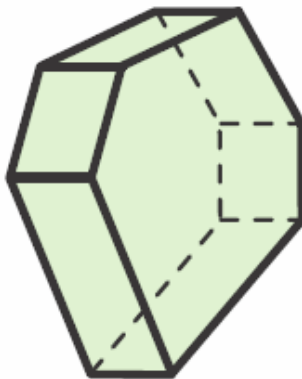
**Full Turn** – rotating or turning a full circle, or  $360^\circ$



**Half-turn** – rotating or turning half the distance around a circle, or  $180^\circ$

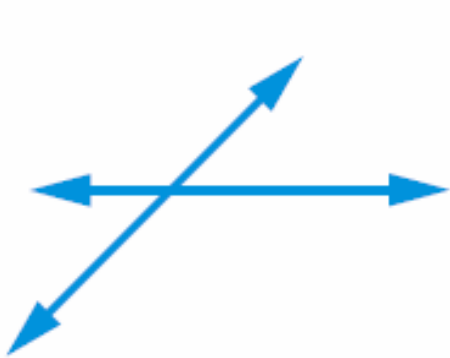


**Hexagonal Prism** – a polyhedron with two parallel and congruent polygonal regions for bases and lateral faces formed by all the line segments with endpoints on corresponding edges of the bases



A hexagonal  
prism

**Intersect**– to share a common point or points

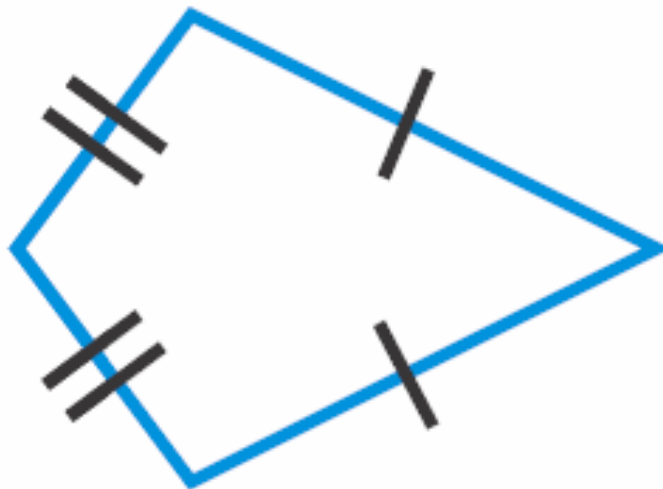


Intersecting lines and  
line segments

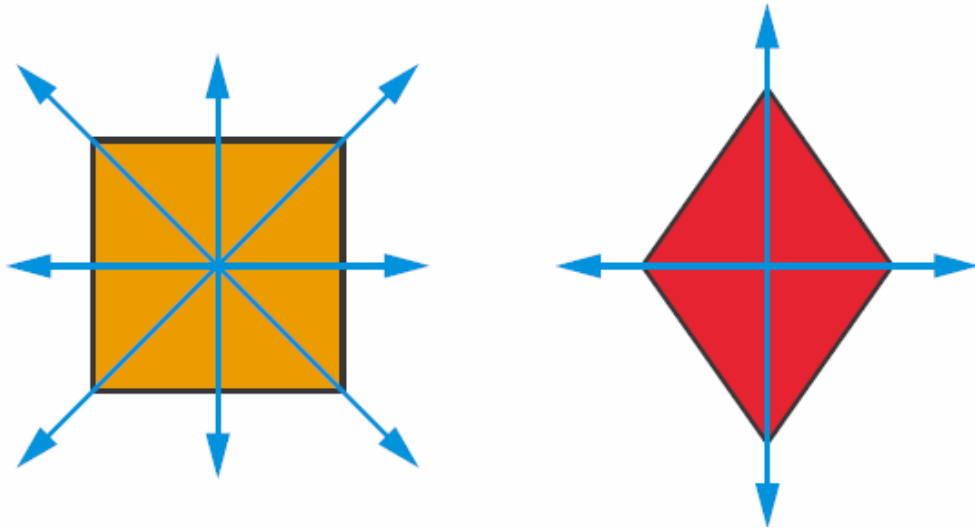


Intersecting  
planes

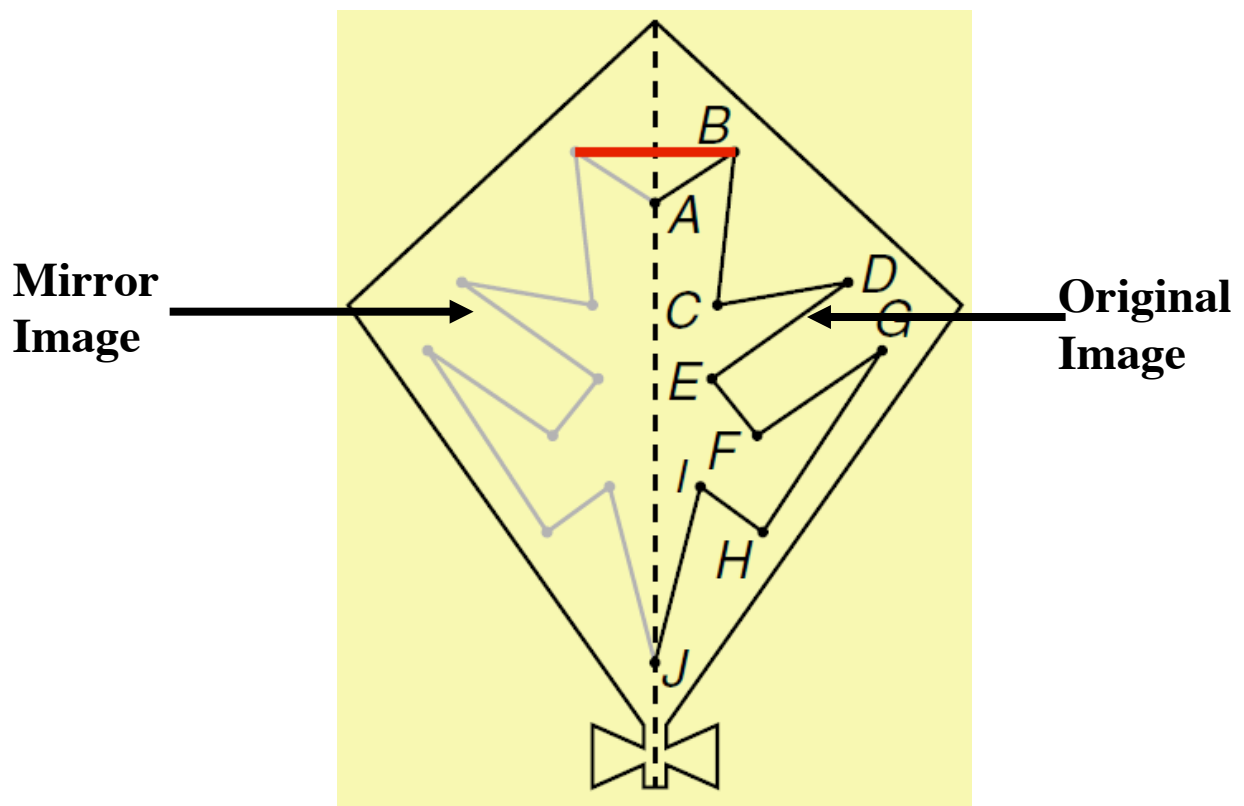
**Kite** – a quadrilateral with two distinct pairs of adjacent sides of equal length; the four sides **cannot** all have the same length



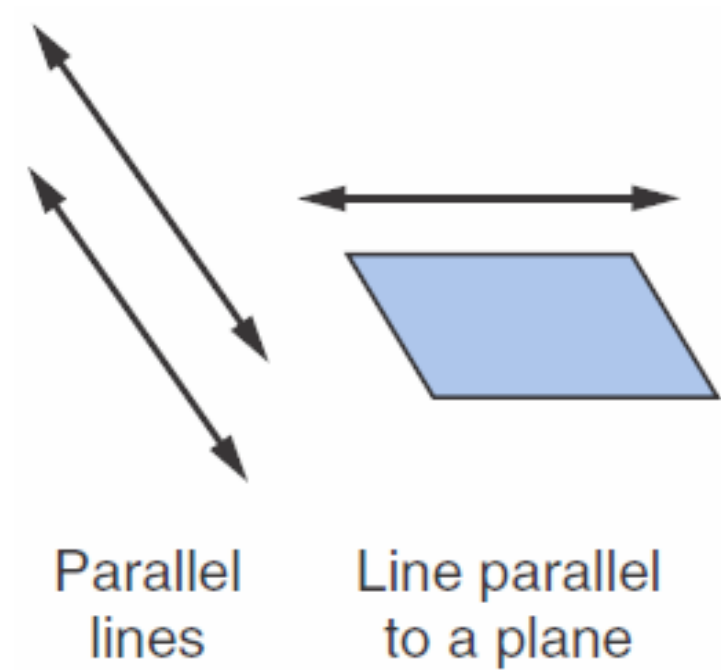
**Line of Symmetry** – a line that divides a figure into two parts that are reflection images of each other; a figure may have 1 or more lines of symmetry



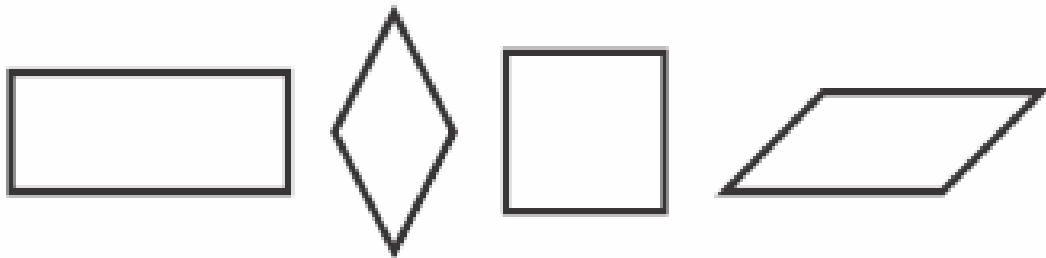
**Mirror Image** – like the reflection in a mirror; an object's mirror image is the same size and same shape but faces the opposite direction



**Parallel lines or line segments** – lines or line segments that are in a plane and never meet; always the same distance apart

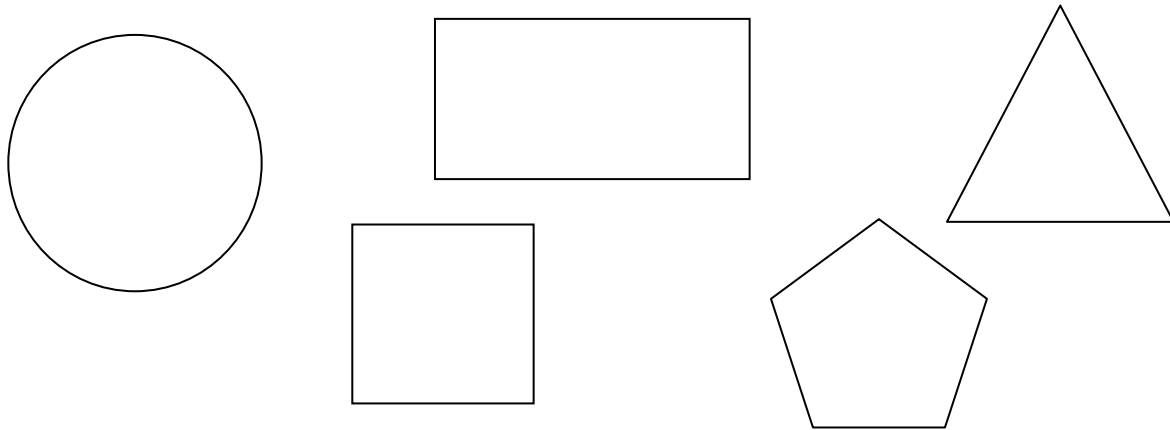


**Parallelograms** – a quadrilateral with two pairs of parallel sides; opposite sides have the same length, and opposite angles have the same measure

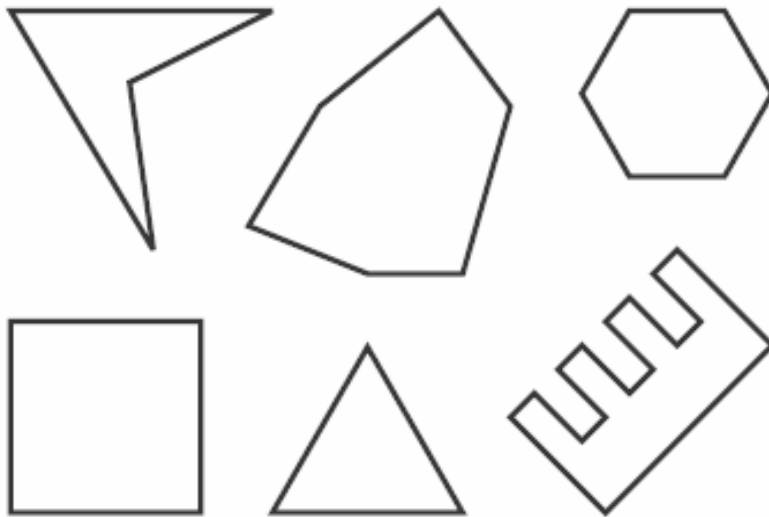


Parallelograms

**Plane Figures** – a 2-dimensional figure that is entirely contained in a single plane

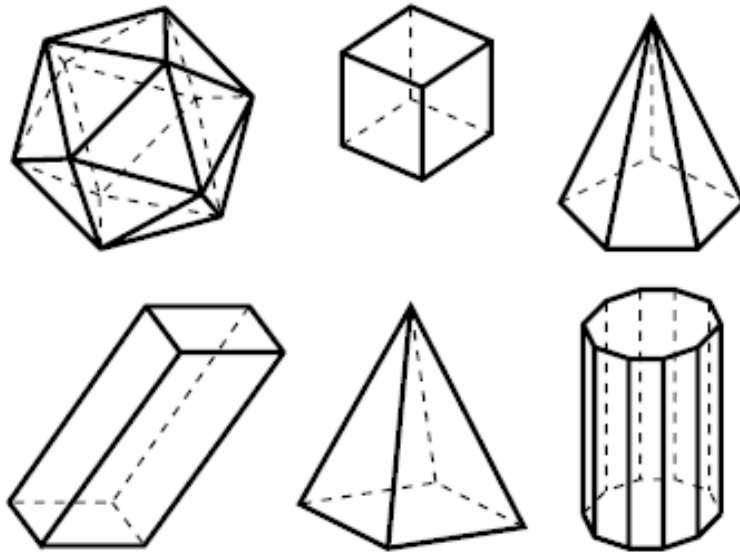


**Polygon** – a 2-dimensional figure formed by three or more line segments (sides) that meet only at their endpoints (vertices) to make a closed path; sides may **not** cross one another

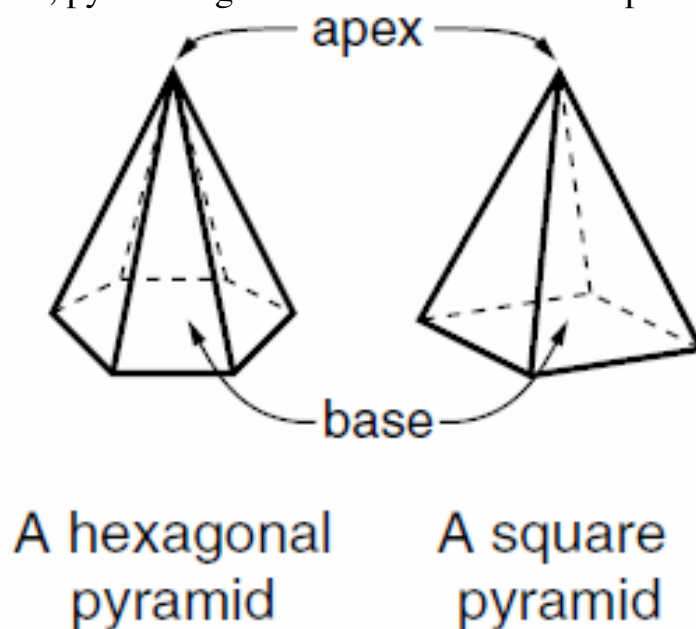


Polygons

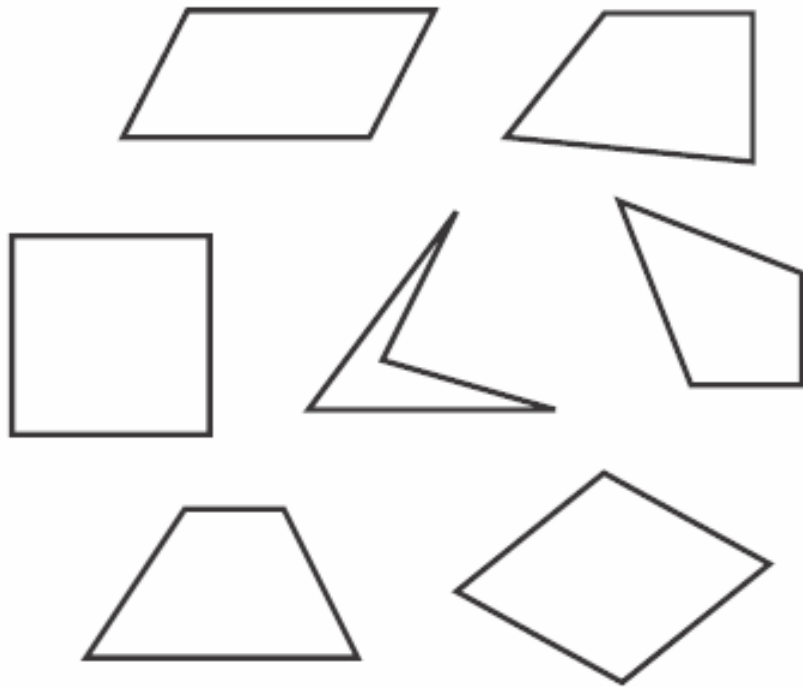
**Polyhedron** — a 3-dimensional figure formed by polygons with their interiors (faces) and having no holes; plural is polyhedrons or polyhedra



**Pyramid** — a polyhedron made up of any polygonal region for a base, a point (apex) not in the plane of the base, and all of the line segments with one endpoint at the apex and the other on an edge of the base; all faces except the base are triangular; pyramids get their name from the shape of their bases

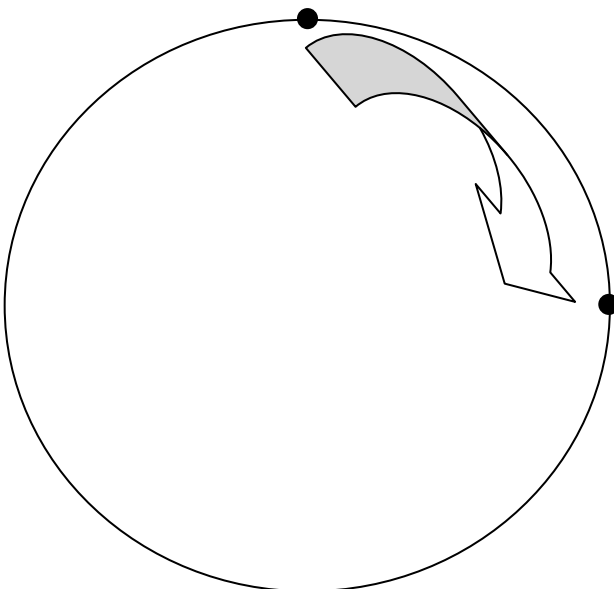


**Quadrangle/Quadrilateral** – a 4-sided polygon

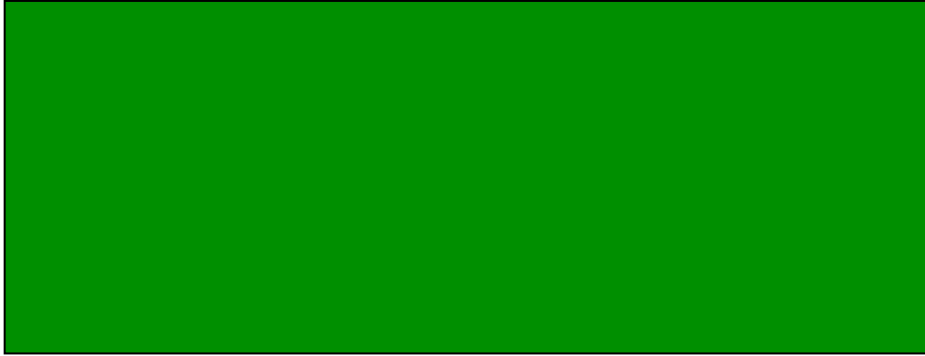


Quadrilaterals

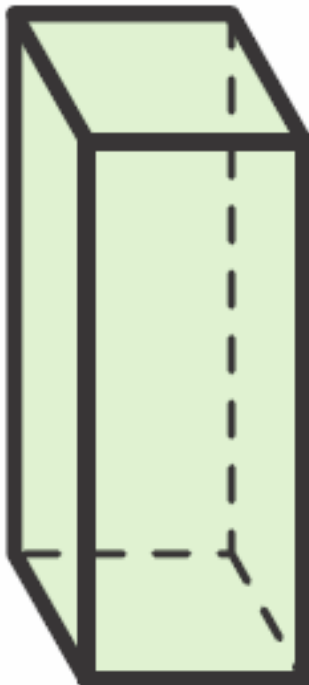
**Quarter-turn** – rotating, or turning, a half of a half-turn or a circle, or  $90^\circ$



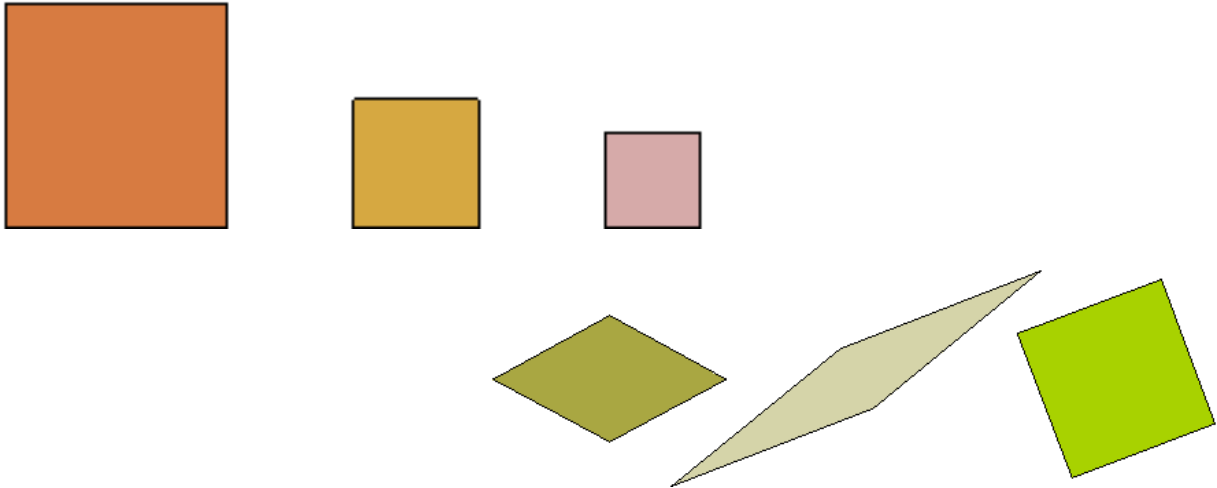
**Rectangle** – a parallelogram with all right angles



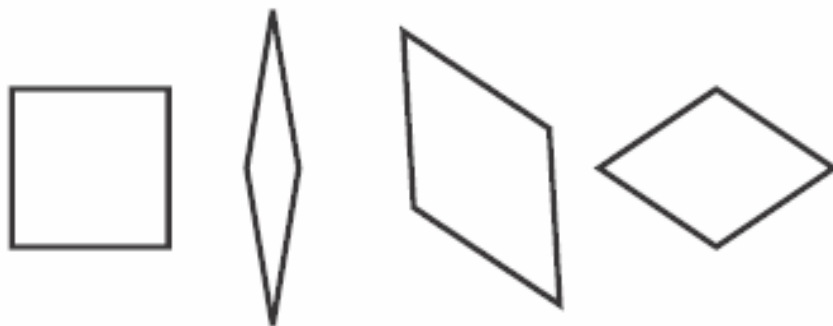
**Rectangular Prism** – a polyhedron with two parallel and congruent polygonal regions for bases and lateral faces formed by all the line segments with endpoints on corresponding edges of the bases



**Regular Polygon** – a polygon in which all sides are the same length and all angles have the same measure

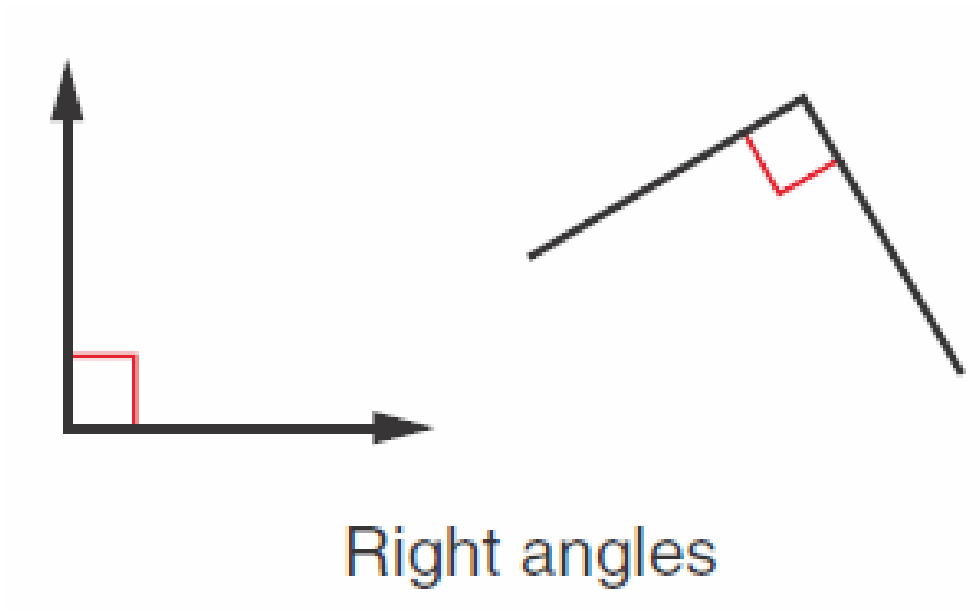


**Rhombus** – a parallelogram with all sides the same length; every square is a rhombus, but not all rhombuses are squares

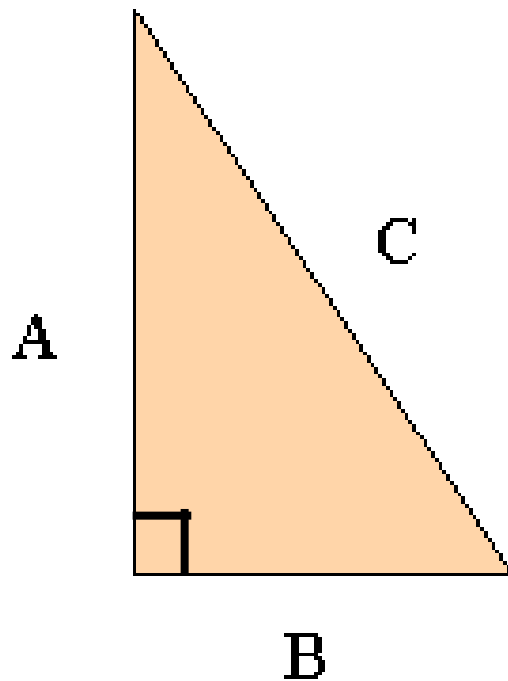


Rhombuses

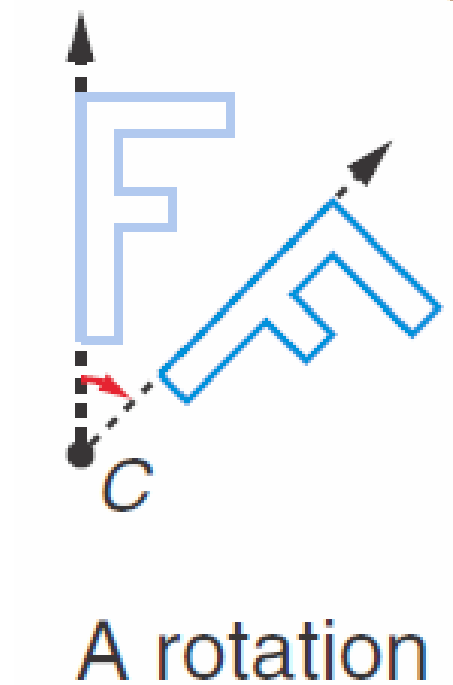
**Right Angle** – a  $90^\circ$  angle



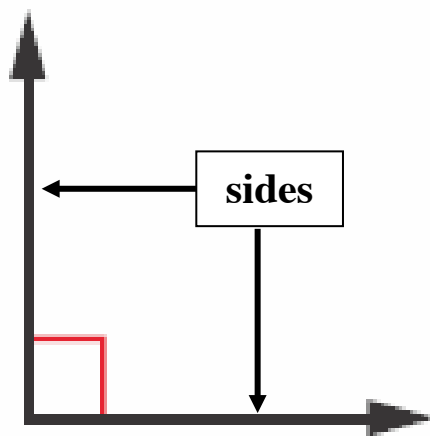
**Right Triangle** – a triangle with a right angle in its interior



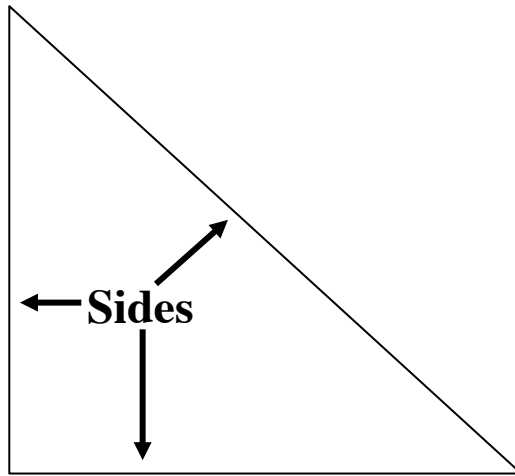
**Rotation** — a point  $P'$  is a rotation image of a point  $P$  around a center of rotation  $C$  if  $P'$  is on the circle with center  $C$  and radius  $CP$ ; also known as a turn



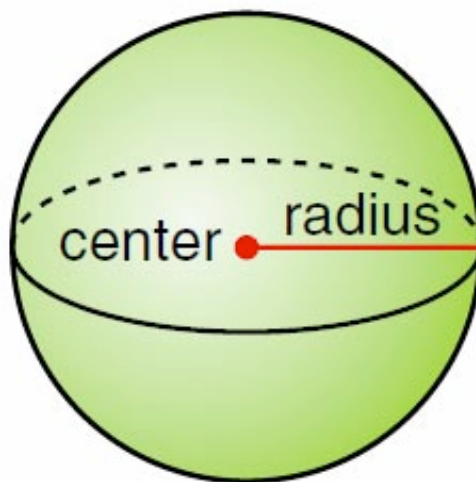
**Side (of an angle)** - one of the line segments that make up a polygon; one of the rays or segments that form an angle; one of the faces of a polyhedron



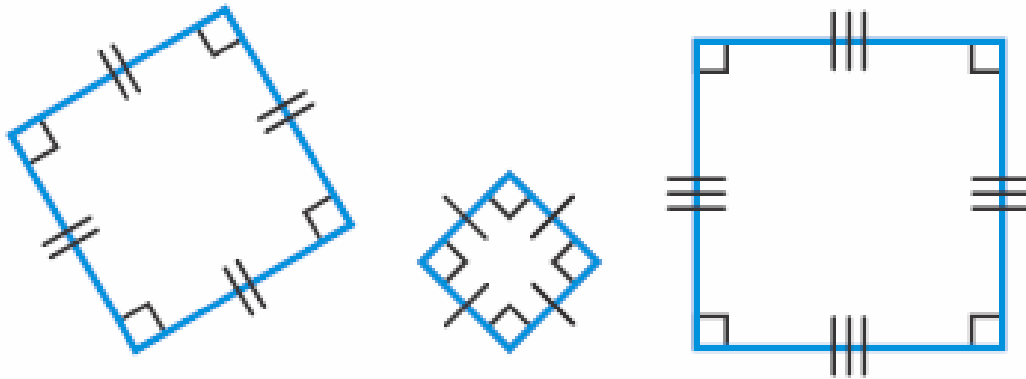
**Side (of a triangle)** - one of the line segments that make up a polygon;  
one of the rays or segments that form an angle



**Sphere** – the set of all points in space that are an equal distance from a fixed point called the center of the sphere; the distance from the center to the sphere is the radius of the sphere; the diameter of a sphere is twice its radius; points inside a sphere are not part of the sphere

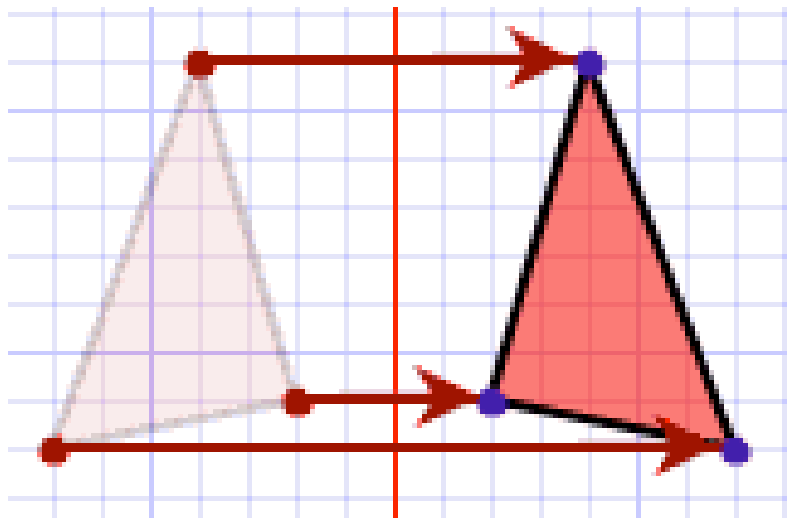


**Square** – a rectangle with all sides of equal length; all angles in a square are right angles; all squares are also rectangles, but not all rectangles are squares

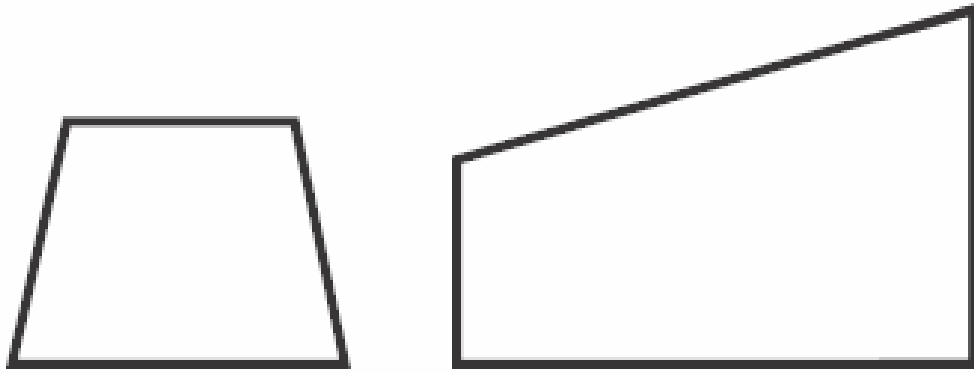


Squares

**Symmetric Figure** – a figure that exactly matches with its image under a reflection or rotation



**Trapezoid** – a quadrilateral that has exactly one pair of parallel sides; both pairs of sides cannot be parallel



## Trapezoids

**Triangle** – a three-sided polygon



equilateral

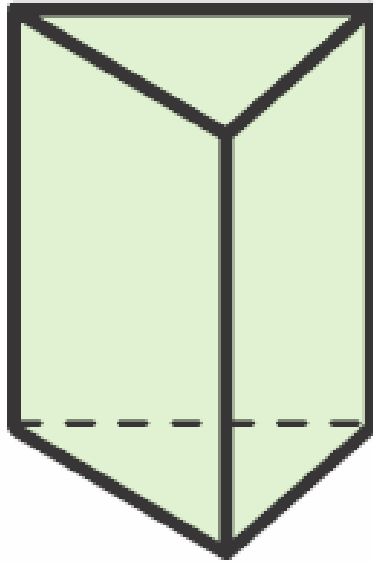
isosceles

scalene

right

## Triangles

**Triangular Prism** - — a polyhedron with two parallel and congruent polygonal regions for bases and lateral faces formed by all the line segments with endpoints on corresponding edges of the bases; a triangular prism has a triangle for a base



**Vertex/Vertices** — the point at which the rays of an angle, the sides of a polygon, or the edges of a polyhedron meet; plural is vertexes or vertices; also known as a corner

